

Bats of the BLM Billings Field Office in south-central Montana, with Emphasis on the Pryor Mountains

Prepared for:

Bureau of Land Management
Billings Field Office
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EXECUTIVE SUMMARY

The Bureau of Land Management (BLM) Billings Field Office harbors the greatest diversity of bat species in Montana, including three species listed as Sensitive by the BLM or Species of Concern by the Montana Natural Heritage Program and the Department of Fish, Wildlife and Parks: Pallid Bat (*Antrozous pallidus*), Spotted Bat (*Euderma maculatum*), and Townsend's Big-eared Bat (*Corynorhinus townsendii*).

The most recent significant survey of bats in the Billings Field Office was undertaken in the summers of 1989-1990, with a lesser survey of potential hibernacula in winter 1992. The three priority species were detected during the summer surveys, and Townsend's Big-eared Bat was detected in winter. A decade has passed with no additional bat surveys to determine the continued presence of the three species of conservation concern, nor have there been additional general surveys of bats in the Billings Field Office area.

We undertook general bat surveys during 2001-2003 of selected areas in the Billings Field Office area with two primary objectives: 1) document the continued presence of the bat species of conservation concern, and 2) document more widely the distribution and habitat associations of all bat species at selected areas of the Billings Field Office. Our work focused on the southwestern slopes of the Pryor Mountains, Carbon County, with a preliminary survey of the Bull Mountains near Roundup, Musselshell County.

We captured or observed 150 individual bats of eight species during 21 nights of netting: Pallid Bat (1); Townsend's Big-eared Bat (8); Big Brown

Bat, *Eptesicus fuscus* (13); Hoary Bat, *Lasiurus cinereus* (1); Western Small-footed Myotis, *Myotis ciliolabrum* (32); Western Long-eared Myotis, *Myotis evotis* (80); Little Brown Myotis, *Myotis lucifugus* (6); and Long-legged Myotis, *Myotis volans* (9). A Pallid Bat was captured at the site along the base of the Pryor Mountains where the species was first discovered in Montana in 1978, Townsend's Big-eared Bats were captured at two caves in the Pryor Mountains where the species was reported in 1990, at a new canyon site in the Pryor Mountains, and at a new bluff site in the Bull Mountains. In addition, we heard or recorded vocalizations of Spotted Bat at nine netting sites, including one location in the Bull Mountains. We detected all of the above species in the Pryor Mountains, and three species (Spotted Bat, Townsend's Big-eared Bat, Western Long-eared Myotis) in the Bull Mountains.

Water sources and mines or caves continue to be important habitat features for bats, particularly in the Pryor Mountains, even though few of these sites are currently protected from human disturbance. Given the significance of the Pryor Mountains area for bats, we suggest that 1) a comprehensive bat conservation plan for the Pryor Mountains be developed to guide future management activity affecting bats and bat habitat, preferably in coordination with the Custer National Forest and possibly the Bighorn Canyon National Recreation Area, and 2) additional surveys for bats be undertaken on BLM lands in the Bull Mountains and along the Yellowstone River corridor to identify the habitat associations and relative importance of these areas for the bat fauna of the BLM's Billings Field Office.

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